Technology Showcase Presentation

Marc Chevrel, CEO
World Agri-Tech Innovation Summit
March 20th, 2018
The Global Food System is Challenged to Sustainably Feed the World in 2050

Meeting global nutritional needs will require an increase of +70% in protein production

Population Growth
By 2050, between 9-11 billion people will be living on the planet, an increase of 2 to 3 billion people

Rising Middle Class
Growth of the middle class will increase demand for meat and fish

Urbanization
By 2050, 65% of world’s population will live in urban areas, allowing for easier access to animal protein

Arbiom Solution: Wood to Food

Arbiom brings wood, a non-food plant, into the food chain

Forest Area as Share of Land Area, 2015

- Wood is abundant and environmentally-friendly
- Supply stocks are increasing in EU, US and China
- No irrigation or fertilizer required
- Strong industrial supply chain
- Available year-round
- Does not compete with food crops

Source: The World Bank – 2013 Copyright © Actualitix.com All rights reserved
Arbiom SylPro Protein Offers Compelling Benefits

**Nutritional**
- 60+% crude protein content
- High digestibility (92%)
- Enhanced amino acid profile
- Antibiotic-free
- Beneficial to gut health
- Safe and non-toxic

**Economical**
- Competitive cost-performance
- **Stable price**
- Decline in paper industry=available supply of biomass
- Economic development in rural communities

**Traceability**
- **Complete traceability** from source to end product
- **Consistent quality** and year-round supply

**Sustainability**
- Renewable, natural source of protein
- Low GHG emissions and low land and water use
- Food security in protein-deficit regions

From Wood to Food
Arbiom Enables Production of High Quality, High Quantity Protein
The Path From Wood to Food

Forestry Material → Highly Fermentable Substrates → Protein Rich Micro-Organisms → SylPro Protein Ingredient
Arbiom’s First Target Market is Aquaculture

Aquaculture is Growing

Aquaculture is Expanding to Meet Global Fish Demand

Aquaculture uses +70% of Global Fishmeal Supply

Fishmeal Consumption by Species

- Poultry
- Pet Food
- Pigs
- Other

Aquaculture uses +70% of Global Fishmeal Supply

Fishmeal Supply is Declining


Aquaculture uses +70% of Global Fishmeal Supply

Fishmeal Supply is Declining

Arbiom Leads Industry Consortium Demonstrating Wood to Food

European project funded by the Bio based Industries joint Undertaking under the European Union’s Horizon 2020 Research and innovation program under grant agreement N° 745591
Arbiom Team

40+ people from diverse backgrounds committed to solving a global challenge

Marc Chevrel
CEO

Alex Berlin
CTO

Anthony Scime
CFO

Hank Madjeski
Senior VP of Development

Charles Henri Nicolas
Project Director

Mike Bedosian
Process Implementation Director

Emily Glenn
Business Development Director

Ricardo Ekmay
Animal Nutrition Director

Lisette Tenlep
Senior Research Director

Sophie Maneval
Corporate Secretary

+500K Experiments
Conducted since 2012

+100 Years
Engineering Experience

4 Years
Pilot Operation
Arbiom is Seeking Partners & Investors

Over the next two years, Arbiom will launch a demonstration program leading to full scale commercial operations.

2012 - Today

- Lab Scale
- Bench Scale

2019 - 2020

- Demonstration Program

2022+

- Commercial Production
Thank You.